

***Compiler's Note: Changes marked were made by the Compiler pursuant to KRS 13A.040(9) and 13A.220(5).**

**TECHNICAL AMENDMENT
July 30, 2018**

401 KAR 51:052. Review of new sources in or impacting upon nonattainment areas.

RELATES TO: KRS 224.20-100, 224.20-110, 224.20-120, 40 C.F.R. Part 51 Appendix S, Part 51 Subpart I, 51.165, 51.166, 51.300, 51.307, 52.21, 60, 61, 70.6, Part 81 Subpart D, 81.318, 42 U.S.C. 7401-7671q

STATUTORY AUTHORITY: KRS 224.10-100(5), 42 U.S.C. 7401-7671q

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100(5) requires the cabinet to promulgate administrative regulations for the prevention, abatement, and control of air pollution. This administrative regulation establishes requirements for the construction or modification of stationary sources within, or impacting upon, areas where the national ambient air quality standards have not been attained. The provisions of this administrative regulation are not more stringent than the corresponding federal requirements.

Section 1. Applicability. This administrative regulation shall apply to the construction of a new major stationary source or a project that is a major modification at an existing major stationary source, which commences construction after September 22, 1982, and locates in or impacts upon an area designated nonattainment under 42 U.S.C. 7407(d)(1)(A)(i).

(1) The provisions of this administrative regulation relating to visibility protection shall also apply to major sources or major modifications in nonattainment areas that potentially have an impact on visibility in a mandatory Class I federal area.

(2) Applicability tests for projects. Except as provided in subsection (3) of this section, a project shall be a major modification for a regulated NSR pollutant only if the project causes a significant emissions increase and a significant net emissions increase, as provided in paragraphs (a) and (b) of this subsection.

(a) Prior to beginning actual construction, the owner or operator shall first determine if a significant emissions increase will occur for the applicable type of unit being constructed or modified according to subparagraphs 1 to 3 of this paragraph.

1. Actual-to-projected actual applicability test for projects that only involve existing emissions units. A significant emissions increase of a regulated NSR pollutant shall be projected to occur if the sum of the difference between the projected actual emissions and the baseline actual emissions for each existing emissions unit equals or exceeds the significant amount for that pollutant.

2. Actual-to-potential test for projects that involve only construction of new emissions units. A significant emissions increase of a regulated NSR pollutant shall be projected to occur if the sum of the potential to emit from each new emissions unit following completion of the project equals or exceeds the significant amount for that pollutant.

3. Hybrid test for projects that involve multiple types of emissions units. A significant emissions increase of a regulated NSR pollutant shall be projected to occur if the sum of the emissions increases for each emissions unit, using the methods specified in subparagraphs 1 and 2 of this paragraph as applicable for each emissions unit, equals or exceeds the significant amount for that pollutant.

(b) Prior to beginning actual construction and after completing the applicable test in para-

graph (a) of this subsection, the owner or operator shall determine for each regulated NSR pollutant if a significant net emissions increase will occur pursuant to 401 KAR 51:001, Section 1(144) and (218).

(3) For a plant-wide applicability limit (PAL) for a regulated NSR pollutant at a major stationary source, the owner or operator of the major stationary source shall comply with the applicable requirements of Section 11 of this administrative regulation.

Section 2. Initial Screening Analyses and Determination of Applicable Requirements.

(1) Review of all sources for emissions limitation compliance.

(a) The cabinet shall examine each proposed major new source and proposed major modification to determine if the source or modification will meet all applicable emissions requirements in the Kentucky State Implementation Plan (SIP) and 40 C.F.R. Parts 60 and 61.

(b) If the cabinet determines from the application and all other available information that the proposed source or modification will not meet the applicable emissions requirements, the permit to construct shall be denied.

(2) Review of specified sources of air quality impact.

(a) The cabinet shall determine if a proposed major stationary source or major modification will be constructed in an area designated as nonattainment pursuant to 42 U.S.C. 7407(d)(1)(A)(i) for a pollutant for which the stationary source or modification is major.

(b) If a designated nonattainment area is projected to be an attainment area as part of an approved control strategy by the new source start-up date, offsets shall not be required if the new source will not cause a new violation.

(3) Fugitive emissions sources. Sections 4 and 10 of this administrative regulation shall not apply to a source or modification that will be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to one (1) of the following categories:

(a) Coal cleaning plants with thermal dryers;

(b) Kraft pulp mills;

(c) Portland cement plants;

(d) Primary zinc smelters;

(e) Iron and steel mills;

(f) Primary aluminum ore reduction plants;

(g) Primary copper smelters;

(h) Municipal incinerators capable of charging more than 250 tons of refuse per day;

(i) Hydrofluoric, sulfuric, or nitric acid plants;

(j) Petroleum refineries;

(k) Lime plants;

(l) Phosphate rock processing plants;

(m) Coke oven batteries;

(n) Sulfur recovery plants;

(o) Carbon black plants, furnace process;

(p) Primary lead smelters;

(q) Fuel conversion plants;

(r) Sintering plants;

(s) Secondary metal production plants;

(t) Chemical process plants, except ethanol production facilities producing ethanol by natural fermentation under the North American Industry Classification System (NAICS) codes

325193 or 312140;

(u) Fossil-fuel boilers, or combination of fossil-fuel boilers, totaling more than 250 million BTUs per hour heat input;

(v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;

(w) Taconite ore processing plants;

(x) Glass fiber processing plants;

(y) Charcoal production plants;

(z) Fossil fuel-fired steam electric plants of more than 250 million BTUs per hour heat input;

or

(aa) Another stationary source category that, as of August 7, 1980, is being regulated under 42 U.S.C. 7411 or 7412.

Section 3. Sources Locating in Designated Attainment or Unclassifiable Areas that Will Cause or Contribute to a Violation of a National Ambient Air Quality Standard.

(1) This section shall apply only to new major stationary sources or new major modifications that will locate in designated attainment or unclassifiable areas, pursuant to 42 U.S.C. 7407(d)(1)(A)(ii) or (iii), if the source or modification will cause impacts that exceed the significance levels, as listed in the table in this subsection, at a locality that does not or will not meet the national ambient air quality standards.

Pollu- tant	Annu- al Aver- age	Averaging Time			
		24- Hou r	8- Hour	3- Hou r	1- Hou r
Sulfur Dioxide	1.0 µg/m ³	5 µg/ m ³	--	25 µg /m ³	--
PM _{2.5}	0.3 µg/m ³	1.2 µg/ m ³	--	--	--
PM ₁₀	1.0 µg/m ³	5 µg/ m ³	--	--	--
Nitro- gen Dioxide	1.0 µg/m ³	--	--	--	--
Carbon Monox- ide	--	--	0.5 mg/ m ³	--	2 mg/ m ³

(2) Sources to which this section applies shall meet the requirements in Section 4(1), (2) and (4) of this administrative regulation and may be exempt from Section 4(3) of this administrative regulation.

(3) For sources of sulfur dioxide (SO₂), particulate matter, and carbon monoxide (CO), the determination that a new major source or major modification will cause or contribute to a violation of a national ambient air quality standard shall be made on a case-by-case basis using the source's allowable emissions in an approved atmospheric simulation model listed in 40 C.F.R. Part 51, Appendix W, "Guideline on Air Quality Models".

(4) For sources of NO_x, the initial determination that a new major source or major modifica-

tion will cause or contribute to a violation of the national ambient air quality standard for nitrogen dioxide (NO₂) shall be made using an approved atmospheric simulation model assuming all the nitric oxide emitted is oxidized to NO₂ by the time the plume reaches ground level. The initial concentration estimates may be adjusted if adequate data are available to account for the expected oxidation rate.

(5) For ozone, sources of VOCs or NO_x locating outside a designated ozone nonattainment area shall be presumed to not have a significant impact on the designated nonattainment area. If ambient monitoring indicates that the area of source location is in fact nonattainment, the source shall be permitted pursuant to this administrative regulation and 401 KAR 52:020 until the area is designated nonattainment pursuant to 42 U.S.C. 7407(d)(1)(A)(i).

(6) The determination that a new major source or major modification will cause or contribute to a violation of a national ambient air quality standard shall be made as of the start-up date.

(7) Applications for major new sources and major modifications locating in attainment or unclassifiable areas, the operation of which will cause a new violation of a national ambient air quality standard but will not contribute to an existing violation, may be approved only if the following conditions are met:

(a) The new source shall:

1. Meet an emissions limitation;
2. Meet a design, operational, or equipment standard; or
3. Control existing sources so that the new source will not cause a violation of a national ambient air quality standard.

(b) The new emissions limitations for the new and existing sources affected shall be state and federally enforceable in accordance with Section 6 of this administrative regulation.

Section 4. Sources Locating in a Designated Nonattainment Area. This section shall apply to a new major stationary source or major modification that will be constructed in an area designated as nonattainment pursuant to 42 U.S.C. 7407(d)(1)(A)(i) for a pollutant for which the stationary source or modification is major. Approval to construct may be granted only if the conditions of this section are met. (1) The new major source or major modification shall be required to meet an emissions limitation that specifies the lowest achievable emissions rate (LAER) for the source.

(2) The applicant shall demonstrate that all existing major sources owned or operated by the applicant, or an entity controlling, controlled by, or under common control with the applicant, in the Commonwealth of Kentucky are in compliance with all applicable emissions limitations and standards specified in [Title] 401 KAR[,], Chapters 50 to 65, and 40 C.F.R. Parts 60 and 61 and 42 U.S.C. 7401-7626, or are in compliance with an expeditious state and federally enforceable compliance schedule or a court decree establishing a compliance schedule.

(3)(a) Except for VOCs or NO_x emissions, emissions from existing sources in the affected area of the proposed new major source or modification, whether or not under the same ownership, shall be reduced or offset at a ratio of at least 1:1, so that there will be reasonable further progress toward attainment of the applicable national ambient air quality standard (NAAQS). Only those transactions in which the emissions being offset are from the same criteria pollutant category shall be accepted.

(b) The ratio of total emissions reductions of VOCs or NO_x to total increased emissions of the same air pollutant shall be at least the ratio indicated for the following ozone nonattainment area classifications:

1. For marginal nonattainment areas, at least 1.1 to 1;
2. For moderate nonattainment areas, at least 1.15 to 1;

3. For serious nonattainment areas, at least 1.2 to 1;
4. For severe nonattainment areas, at least 1.3 to 1; and
5. For extreme nonattainment areas, at least 1.5 to 1.

(4) The emissions reductions shall provide a positive net air quality benefit in the affected area.

(a) Atmospheric simulation modeling shall not be required for VOCs and NOx.

(b) Except as provided in Section 3(5) of this administrative regulation, compliance with subsection (3) of this section and Section 5(3)(e) of this administrative regulation shall be adequate to meet this condition.

(5) The proposed major stationary source or major modification shall include in the application for a construction permit an analysis of the alternative sites, sizes, production processes, and environmental control techniques for the proposed source, which demonstrates that benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

Section 5. Determining Credit for Emissions Offsets.

(1) The baseline for determining credit for emissions reductions or offsets shall be, considering that baseline actual emissions as defined in 401 KAR 51:001, Section 1(20), shall not be used for determining the baseline for emissions offsets:

(a) The emissions limitations in effect when the application to construct or modify a source is filed; or

(b) The actual emissions of the source from which offset credit is attained if:

1. The demonstration of reasonable further progress and attainment of ambient air quality standards for the SIP was based on actual emissions; or

2. The SIP does not contain an emissions limitation for that source or source category.

(2) Credit for emissions offsets. Credit for emissions offset purposes may be allowed for existing control if the existing control goes beyond the control required under 401 KAR Chapters 50 to 65 and applicable federal regulations.

(3) General provisions for calculating offset values.

(a) Offset calculations shall be made on a pound-per-hour basis if all facilities involved in the emissions offset calculations are operating at their maximum or allowed production rate.

(b) Offsets may be calculated on a tons-per-year basis if baseline emissions for existing sources providing the offsets are calculated using the actual annual operating hours for the previous two (2) year period.

(c) If the cabinet requires certain hardware controls instead of an emissions limitation, baseline allowable emissions shall be based on actual operating conditions for the previous two (2) year period in conjunction with the required hardware controls.

(d) If the emissions limitations required by the cabinet allow greater emissions than the uncontrolled emissions rate of the source, emissions offset credit shall be allowed only for control below the uncontrolled emissions rate.

(e) The owner or operator of a new or modified major stationary source shall comply with any offset requirement in effect under this administrative regulation to increase emissions of an air pollutant by obtaining emissions reductions of the air pollutant from:

1. The same source or other sources in the same nonattainment area; or

2. A source in another nonattainment area if:

a. The other area has an equal or higher nonattainment classification than the area in which the source is located; and

b. Emissions from the other area contribute to a violation of the national ambient air quality

standard in the nonattainment area in which the source is located.

(4) Calculating offsets if an applicable emissions limitation does not exist. If the Kentucky SIP does not contain an emissions limitation for a source or source category, the emissions offset baseline involving the source shall be actual emissions determined under actual operating conditions for the previous two (2) year period.

(5) Calculating offsets for existing fuel combustion sources.

(a) The emissions for determining emissions offset credit involving an existing fuel combustion source shall be the allowable emissions under the emissions limitation requirements of the cabinet for the type of fuel being burned when the new major source or major modification application is filed.

(b) If the existing source has switched to a different type of fuel at some earlier date, a resulting emissions reduction, either actual or allowable, shall not be used for emissions offset credit.

(c) If the existing source commits to switch to a cleaner fuel at some future date, emissions offset credit based on the allowable emissions for the fuels involved shall not be allowed unless the permit is conditioned to require the use of a specified alternative control measure that will achieve the same degree of emissions reduction if the source switches back to a dirtier fuel at some later date.

(6) Calculating offsets for operating hours and source shutdowns.

(a) A source may be credited with emissions reductions achieved by shutting down an existing source or permanently curtailing production or operating hours below baseline levels if the work force to be affected has been notified in writing of the proposed shutdown or curtailment.

(b) Emissions reductions achieved by shutting down an existing emissions unit or curtailing production or operating hours:

1. May be generally credited for offsets pursuant to 40 C.F.R. 51.165(a)(3)(ii)(C)(1) if:

a. The reductions are surplus, permanent, quantifiable, and federally enforceable; and

b. The shutdown or curtailment occurred after the last day of the base year for the SIP planning process.

(i) The cabinet may consider a prior shutdown or curtailment to have occurred after the last day of the base year if the projected emissions inventory used to develop an attainment demonstration explicitly includes the emissions from the previously shutdown or curtailed emission unit, pursuant to 40 C.F.R. 51.165(a)(3)(ii)(C)(1)(ii).

(ii) Credit shall not be given for a shutdown that occurred before August 7, 1977;

2. That do not meet the requirements of subparagraph 1.b. of this paragraph may be generally credited pursuant to 40 C.F.R. 51.165(a)(3)(ii)(C)(2) if:

a. The shutdown or curtailment occurred on or after the date the construction permit application is filed; or

b. The applicant establishes that the proposed new emissions unit is a replacement for the shutdown or curtailed emissions unit, and the emissions reductions achieved by the shutdown or curtailment meet the requirements of subparagraph 1.a. of this paragraph.

(7) Calculating offsets for hydrocarbon substitution. An emissions offset credit shall not be allowed for replacing one volatile organic compound with another of lesser photochemical reactivity, unless the replacement compound is methane, ethane, 1,1,1-trichloroethane, or trichlorofluoroethane.

(8) Banking of emissions offset credit.

(a) New sources obtaining permits by applying offsets after the effective date of this administrative regulation may bank offsets that exceed the requirements of Section 5(3) of this administrative regulation.

(b) An owner or operator of an existing source that reduces its own emissions may bank a resulting reduction beyond those required by regulation for use under this administrative regulation, even if the offsets are applied immediately to a new source permit.

(c) Banked emissions offsets may be used under the preconstruction review program required in 42 U.S.C. 7401 to 7626, as long as these banked emissions are identified and accounted for in Kentucky's control strategy.

(9) Offset credit for meeting NSPS or NESHAPS.

(a) If a source is subject to an emissions limitation established in a New Source Performance Standard (NSPS) or a National Emissions Standard for Hazardous Air Pollutants (NESHAPS) and a different emissions limitation is required by the cabinet, the more stringent limitation shall be used as the baseline for determining credit for emissions offsets.

(b) The difference in emissions between NSPS or NESHAPS and other emissions limitations shall not be used as offset credit.

Section 6. Administrative Procedures for Emissions Offsets.

(1) Emission reductions shall be enforceable by the cabinet and the U.S. EPA, and shall be accomplished by the start-up date of the new source.

(a) If emissions reductions are to be obtained in a state that neighbors the Commonwealth for a new source to be located in the Commonwealth, the emissions reductions shall be enforceable by the neighboring state or local agencies and the U.S. EPA.

(b) The necessary emissions offsets may be proposed by the owner of the proposed source or by the cabinet.

(2) Source initiated emissions offsets.

(a) The owner or operator of a source may propose:

1. Internal emissions offsets, which involve reductions from sources controlled by the owner;

or

2. External emissions offsets, which involve reductions from other sources, if the emissions offsets meet the requirements of this section and Section 4(3) of this administrative regulation.

(b) An internal emissions offset shall be included and made enforceable as a condition of the source's permit.

(c) An external emissions offset shall only be accepted if the cabinet requires the affected source to comply with a new emissions limitation to ensure that its emissions shall be reduced by a specified amount in a specified time; and the new emissions limitation shall be enforceable by the cabinet and the U.S. EPA.

(3) Cabinet initiated emissions offsets.

(a) The cabinet may commit to reducing emissions from mobile sources and other existing sources to provide a net air quality benefit in the impact area of a proposed new source to accommodate the proposed new source.

(b) This emissions reduction commitment shall be reflected in the emissions limitation requirements for the new and existing sources as required by this section.

Section 7. Source Obligation.

(1) An owner or operator of a source or modification subject to this administrative regulation shall construct and operate the source or modification in accordance with the application submitted to the cabinet under this administrative regulation and 401 KAR 52:020 or under the terms of an approval to construct.

(2)(a) Approval to construct shall become invalid if construction:

1. Is not commenced within eighteen (18) months after receipt of the approval;

2. Is discontinued for a period of eighteen (18) months or more; or
3. Is not completed within a reasonable time.

(b) The cabinet may extend the eighteen (18) month period upon a satisfactory demonstration that an extension is justified.

1. An extension shall not apply to the time period between construction of the approved phases of a phased construction project; and

2. Each phase shall commence construction within eighteen (18) months of the projected and approved commencement date.

(3) Approval to construct shall not relieve an owner or operator of the responsibility to comply fully with applicable provisions of 401 KAR Chapters 50 to 65 and other applicable requirements under local, state, or federal law.

(4) If a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in an enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, the requirements of this administrative regulation shall apply to the source or modification as though construction had not yet commenced on the source or modification.

(5)(a) The provisions of this subsection shall apply to projects at existing emissions units at a major stationary source other than projects at a source with a PAL, if:

1. There is a reasonable possibility that a project that is not part of a major modification may result in a significant emissions increase; and

2. The owner or operator uses the method specified in 401 KAR 51:001, Section 1(199)(b) to calculate projected actual emissions.

(b) Before beginning actual construction of a project specified in paragraph (a) of this subsection, the owner or operator shall document and maintain a record of the following information:

1. A description of the project;

2. Identification of the emissions units for which emissions of a regulated NSR pollutant may be affected by the project; and

3. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:

- a. Baseline actual emissions;

- b. Projected actual emissions;

- c. Amount of emissions excluded in calculating projected actual emissions and an explanation for why that amount was excluded; and

- d. Any applicable netting calculations.

(c) For a project specified in paragraph (a) of this subsection, the owner or operator shall:

1. Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that are emitted by an emissions unit identified in paragraph (a)2 of this subsection; and

2. Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for:

- a. Five (5) years following resumption of regular operations after the change; or

- b. Ten (10) years if the project increases the design capacity of or potential to emit for that regulated NSR pollutant at the emissions unit.

(d) If the unit is an existing EUSGU, before beginning actual construction, the owner or operator:

1. Shall provide a copy of the information in paragraph (b) of this subsection to the cabinet; and

2. Shall not be required to obtain a determination from the cabinet before beginning actual construction; and

3. Shall submit a report to the cabinet within sixty (60) days after the end of each year during which records are required to be generated under paragraph (b) of this subsection that contains the unit's annual emissions during the calendar year preceding report submittal.

(e)1. For an existing unit other than an EUSGU, the owner or operator shall submit a report to the cabinet if:

a. The annual emissions, in tons per year, from a project identified in paragraph (a) of this subsection exceed the baseline actual emissions, as documented and maintained pursuant to paragraph (b)3 of this subsection, by a significant amount for that regulated NSR pollutant; and

b. The emissions differ from the preconstruction projection as documented and maintained pursuant to paragraph (b)3 of this subsection.

2. The report shall be submitted to the cabinet within sixty (60) days after the end of the year during which records are required to be generated under paragraph (b) of this subsection and shall contain the following:

a. The name, address, and telephone number of the major stationary source;

b. The annual emissions as calculated pursuant to paragraph (c) of this subsection; and

c. Any other information that the owner or operator wishes to include in the report.

(f) The owner or operator of the source shall make the information required to be documented and maintained under this subsection available for review upon request for inspection by the cabinet or the general public pursuant to 401 KAR 52:100.

Section 8. Permit Condition Rescission.

(1) An owner or operator holding a permit for a stationary source or modification that was issued pursuant to 401 KAR 51:050 or 51:051E may request that the cabinet rescind the applicable conditions.

(2) The cabinet shall rescind a permit condition if the owner or operator:

(a) Requests and demonstrates to the satisfaction of the cabinet that this administrative regulation does not apply to the source or modification or to a portion of the source or modification if construction will have commenced after September 22, 1982; and

(b) Demonstrates that the rescission will not violate the requirements of Sections 4(3) and 7 of this administrative regulation.

Section 9. Class I Areas.

(1) The following areas, which were in existence on August 7, 1977, shall be Class I areas and shall not be redesignated:

(a) International parks;

(b) National wilderness areas and national memorial parks which exceed 5,000 acres in size; and

(c) National parks that exceed 6,000 acres in size.

(2) Any other area, unless otherwise specified in the legislation creating the area, is designated Class II but may be redesignated as provided in 40 C.F.R. 51.166(g).

(3) The visibility protection requirements of this administrative regulation shall apply only to sources that may impact a mandatory Class I federal area.

(4) The following areas may be redesignated only as Class I or II:

(a) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and

(b) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.

Section 10. Protection of Visibility.

(1) New source review; applicability and exemptions.

(a) A stationary source or modification to which this section applies shall not begin actual construction without a permit that states the stationary source or modification shall meet the requirements of this section.

(b) This section shall apply to construction of a new major stationary source or major modification that will be constructed in an area designated as nonattainment under 42 U.S.C. 7407(d)(1)(A)(i) and potentially have an impact on visibility in a Class I area.

(c) This section shall apply to a major stationary source or major modification for each pollutant subject to regulation under 42 U.S.C. 7401 to 7626 that it will emit, except as provided in paragraphs (d) and (e) of this subsection.

(d) This section shall not apply to a particular major stationary source or major modification if:

1. The source or modification is a nonprofit health or nonprofit educational institution or a major modification will occur at the institution, and the Governor of the Commonwealth requests that it be exempt from the requirements of this section; and

2. The source is a portable stationary source that has previously received a permit under this section and will be temporarily relocated; and

a.~~[(a)]~~ The emissions from the source will not exceed the allowable emissions;

b. The emissions from the source will not impact a Class I area or an area where an applicable increment is known to be violated; and

c. Reasonable notice is given to the cabinet prior to the relocation, identifying the proposed new location and the probable duration of operation at the new location. The notice shall be given to the cabinet not less than ten (10) days in advance of the proposed relocation unless a different time duration is previously approved by the cabinet pursuant to this section.

(e) This section shall not apply to a major stationary source or major modification with respect to a particular pollutant, if the allowable emissions of that pollutant from the source, or the net emissions increase of that pollutant from the modification:

1. Will not impact a Class I area;

2. Will not impact an area where an applicable increment is known to be violated; and

3. Will be temporary.

(2) Visibility impact analyses. The owner or operator of a source shall provide an analysis of the impairment to visibility that will occur in a Class I area as a result of the source or modification and general commercial, residential, industrial, and other growth associated with the source or modification.

(3) Federal land manager notification.

(a) The federal land manager and the federal official charged with direct responsibility for management of Class I areas shall have an affirmative responsibility to protect the visibility and other air quality related values of the Class I lands and to consider, in consultation with the cabinet, if a proposed source or modification will have an adverse impact on these values.

(b) The cabinet shall provide written notification to all affected federal land managers and to the federal official charged with direct responsibility for management of lands within the Class I area of a permit application or an advanced notice of a permit application for a proposed new major stationary source or major modification that may affect visibility in a Class I area. The notification shall:

1. Include a copy of all information relevant to the permit application;
2. Be submitted pursuant to this paragraph within thirty (30) days of receipt of the permit application or advanced notice of permit application and at least sixty (60) days prior to a public hearing on the application for a permit to construct; and

3. Include an analysis of the proposed source's anticipated impacts on visibility in a Class I area.

(c)1. The cabinet shall consider an analysis by the federal land manager, provided within thirty (30) days of the notification and analysis required by paragraph (b) of this subsection, that the proposed new major stationary source or major modification may have an adverse impact on visibility in a Class I area.

2. If the cabinet finds that the analysis does not demonstrate, to the satisfaction of the cabinet, that an adverse impact on visibility will result in the Class I area, the cabinet shall, in the public hearing notice required in 401 KAR 52:100, either explain that decision or give notice as to where the explanation may be obtained.

(d) Adverse impact on visibility as it applies to paragraph (c) of this subsection shall be determined on a case-by-case basis, taking into account the geographic extent, intensity, duration, frequency, and time of visibility impairments, and how these factors correlate with the times of visitor use of the Class I area, and the frequency and time of natural conditions that reduce visibility.

(4) Public participation. The cabinet shall follow the applicable procedures of 401 KAR 52:100 in processing applications under this section and shall follow the procedures at 40 C.F.R. 52.21(r), effective July 1, 2009, to the extent that the procedures of 401 KAR 52:100 do not apply.

(5) National visibility goal.

(a) The cabinet shall only issue permits to those sources for which emissions will be consistent with making reasonable progress toward the national goal of preventing future, and remedying existing, impairment of visibility in Class I areas which impairment results from manmade air pollution.

(b) In making the decision to issue a permit, the cabinet shall consider:

1. The costs of compliance;
2. The time necessary for compliance;
3. The energy and non-air quality environmental impacts of compliance; and
4. The useful life of the source.

(6) Monitoring.

(a) The cabinet may require monitoring of visibility in a Class I area near the proposed new stationary source or major modification using human observations, teleradiometers, photographic cameras, nephelometers, fine particulate monitors, or other appropriate methods as specified by the U.S. EPA.

(b) The monitoring method selected shall be determined on a case-by-case basis by the cabinet.

(c) The cabinet shall not undertake visibility monitoring in a Class I area without the approval of the federal land manager.

(d) Data obtained from visibility monitoring shall be made available to the cabinet, the federal land manager, and the U.S. EPA, upon request.

Section 11. Plant-wide Applicability Limit Provisions. The cabinet may approve the use of an actuals PAL (PAL) for an existing major stationary source if the PAL meets the requirements of this section.

(1) General provisions.

(a) An owner or operator may execute a project without triggering major NSR, if the source maintains its total source-wide emissions below the PAL level, meets the requirements in this section, and complies with the PAL permit. If these conditions are met, a project:

1. Shall not be considered a major modification for the PAL pollutant;
2. Shall not have to be approved through Kentucky's major NSR program; and
3. Shall not be subject to the provisions of Section 7(4) of this administrative regulation concerning restrictions on relaxing enforceable emissions limitations that the major stationary source used to avoid applicability of the major NSR program.

(b) Except as provided under subparagraph (1)(a)3 of this section, the major stationary source shall continue to comply with all applicable federal or state requirements, emissions limitations, and work practice requirements that were established prior to the effective date of the PAL.

(c) The cabinet shall not allow a PAL for VOC or NO_x for any major stationary source located in an extreme ozone nonattainment area.

(2) Permit application requirements. The owner or operator of a major stationary source shall submit the following information to the cabinet for approval as part of an application for a permit or permit revision requesting a PAL:

(a) A list of all emissions units at the source designated as small, significant or major, based on their potential to emit;

(b) Identification of the federal and state applicable requirements, emissions limitations, and work practice requirements that apply to each emissions unit;

(c) Calculations of the baseline actual emissions for the emissions units with supporting documentation; and

(d) The calculation procedures the owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a twelve (12) month rolling total for each month as required by subsection (12)(a) of this section.

(3) Establishing a PAL. The cabinet shall establish a PAL at a major stationary source in a federally enforceable permit pursuant to the requirements of this section.

(a) The PAL shall impose an annual emissions limitation in tons per year that is enforceable as a practical matter for the entire major stationary source, in which:

1. For each month during the PAL effective period after the first twelve (12) months of establishing a PAL, the owner or operator shall demonstrate that the sum of the monthly emissions from each emissions unit under the PAL for the previous twelve (12) consecutive months is less than the PAL as a twelve (12) month average, rolled monthly; and

2. For each month during the first eleven (11) months from the PAL effective date, the owner or operator shall demonstrate that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL;

(b) The PAL shall be established in a PAL permit that:

1. Meets the public participation requirements in subsection (4) of this section; and

2. Contains all the requirements of subsection (6) of this section;

(c) A PAL shall include fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL pollutant at the major stationary source;

(d) Each PAL shall regulate emissions of only one (1) pollutant;

(e) Each PAL shall have a PAL effective period of ten (10) years;

(f) The owner or operator of a major stationary source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements of subsections (11) to (13) of this section for each emissions unit under the PAL through the PAL effective period; and

(g) Emissions reductions of a PAL pollutant that occur during the PAL effective period shall not be creditable as decreases for offsets under 40 C.F.R. 51.165(a)(3)(ii), unless:

1. The level of the PAL is reduced by the amount of the emissions reductions; and
2. The reductions would be creditable in the absence of the PAL.

(4) Public participation requirements. PALs for existing major stationary sources shall be established, renewed, or increased pursuant to this subsection and the applicable procedures of 401 KAR 52:100 for issuing permits or permit revisions. The cabinet shall:

(a) Provide the public with notice of the proposed approval of a PAL permit with at least a thirty (30) day period for submittal of public comment; and

(b) Address all material comments before taking final action on a PAL permit or permit revision.

(5) Setting the ten (10) year PAL level.

(a) The PAL level for a major stationary source shall be the sum of the baseline actual emissions of the PAL pollutant for each emissions unit at the source during the chosen twenty-four (24) month period plus the applicable significant level for the PAL pollutant under the definition for "significant" in 401 KAR 51:001, Section 1 or under 42 U.S.C. 7401-7671q, whichever is lower.

(b) In establishing a PAL level for a PAL pollutant, only one (1) consecutive twenty-four (24) month period shall be used to determine the baseline actual emissions for all existing emissions units.

(c) A different consecutive twenty-four (24) month period may be used for each different PAL pollutant.

(d) Emissions associated with units that were permanently shut down after the chosen twenty-four (24) month period shall be subtracted from the PAL level.

(e) Emissions from units for which actual construction began after the twenty-four (24) month period shall be added to the PAL level in an amount equal to the potential to emit of the units.

(f) The cabinet shall specify a reduced PAL level in the PAL permit to become effective on the future compliance date of any applicable federal or state regulatory requirement that the cabinet is aware of prior to issuance of the PAL permit.

(6) Contents of the PAL permit. The PAL permit shall contain the following information:

(a) The PAL pollutant and the applicable source-wide emissions limitation in tons per year;

(b) The PAL permit effective date and the expiration date of the PAL or PAL effective period;

(c) Specification in the PAL permit that if a major stationary source owner or operator applies to renew a PAL under subsection (9) of this section before the end of the PAL effective period, the PAL shall remain in effect until a revised PAL permit is issued by the cabinet;

(d) A requirement that emissions calculations for compliance purposes include emissions from startups, shutdowns, and malfunctions;

(e) A requirement that, once the PAL expires, the major stationary source shall be subject to the requirements of subsection (8) of this section;

(f) The calculation procedures that the major stationary source owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a twelve (12) month rolling total for each month as required by subsection (12)(a) of this section;

(g) A requirement that the major stationary source owner or operator shall monitor all emissions units in accordance with the provisions in subsection (12) of this section;

(h) A requirement that the owner or operator shall retain the records required under subsection (12) of this section on site. Records may be retained in an electronic format;

(i) A requirement for the owner or operator to submit, by the reports required under subsec-

tion (13) of this section by the required deadlines; and

(j) Any requirements necessary to implement and enforce the PAL.

(7) PAL effective period and reopening of a PAL permit.

(a) A PAL effective period shall be ten (10) years.

(b) The cabinet shall reopen a PAL permit to:

1. Correct typographical or calculation errors made in setting the PAL;

2. Reflect a more accurate determination of emissions used to establish the PAL;

3. Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets under 40 C.F.R. 51.165(a)(3)(ii); or

4. Revise the PAL to reflect an increase in the PAL according to subsection (10) of this section.

(c) The cabinet may reopen the PAL permit, during the PAL effective period, to:

1. Reduce the PAL to reflect newly applicable federal requirements with compliance dates after the PAL effective date;

2. Reduce the PAL consistent with any other requirement:

a. That is enforceable as a practical matter; and

b. That may be imposed on the major stationary source under the SIP; and

3. Reduce the PAL if the cabinet determines that a reduction is necessary to avoid causing or contributing to:

a. A National Ambient Air Quality Standard (NAAQS) or PSD increment violation; or

b. An adverse impact on visibility or another air quality related value that has been identified for a federal Class I area by a federal land manager and for which information is available to the general public.

(d) All permit reopenings shall be carried out under the public participation requirements of subsection (4) of this section except for permit reopenings to correct typographical or calculation of errors that do not increase the PAL level.

(8) Expiration of a PAL. A PAL that is not renewed shall expire at the end of the PAL effective period and the requirements of this subsection shall then apply.

(a) Each emissions unit, or each group of emissions units, that existed under the PAL shall comply with an allowable emissions limitation under a revised permit established as follows:

1. An owner or operator of a major stationary source using a PAL shall submit a proposed allowable emissions limitation for each emissions unit, or each group of emissions units, by distributing the PAL allowable emissions for the major stationary source among each of the emissions units that existed under the PAL.

a. This proposal shall be submitted to the cabinet at least six (6) months before the expiration of the PAL permit but not sooner than eighteen (18) months before permit expiration.

b. If the PAL has not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under subsection (9)(e) of this section, distribution of allowable emissions shall be made as if the PAL has been adjusted.

2. The cabinet shall provide the date and procedure the owner or operator shall use to distribute the PAL allowable emissions.

3. The cabinet shall issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the cabinet determines is appropriate.

(b) Each emissions unit shall comply with the allowable emissions limitation on a twelve (12) month rolling basis. The cabinet may approve the use of monitoring systems other than CEMS, CERMS, PEMS, or CPMS if the alternate monitoring system demonstrates compliance with the allowable emissions limitation.

(c) The source shall continue to comply with a source-wide, multiunit emissions cap equiva-

lent to the level of the PAL emissions limitation until the cabinet issues the revised permit incorporating allowable limits for each emissions unit or each group of emissions units.

(d) A major modification at the major stationary source shall be subject to major NSR requirements.

(e) The major stationary source owner or operator shall continue to comply with any state or federal applicable requirements eliminated by the PAL that applied during or before the PAL effective period, except for those emissions limitations established pursuant to Section 7(4) of this administrative regulation.

(9) Renewal of a PAL.

(a) Public participation requirements.

1. The cabinet shall follow the public participation procedures specified in subsection (4) of this section in approving a request to renew a PAL for a major stationary source.

2. The cabinet shall provide a written rationale for the proposed PAL level for public review and comment.

3. Any person may propose a PAL level for the source for consideration by the cabinet during the public review period.

(b) Application deadline.

1. A major stationary source owner or operator shall submit an application for renewal of a PAL at least six (6) months before the date of permit expiration but not earlier than eighteen (18) months before permit expiration.

2. The deadline for application submittal shall ensure that the permit shall not expire before the permit is renewed.

3. If a complete application for renewal is submitted within the timeframe specified in subparagraph 1 of this paragraph, the PAL shall continue to be effective until the revised permit with the renewed PAL is issued.

(c) Application requirements. The application to renew a PAL permit shall contain:

1. The information required in subsection (2) of this section;

2. A proposed PAL level;

3. The sum of the potential to emit of all emissions units under the PAL with supporting documentation; and

4. Any other information the owner or operator wishes the cabinet to consider in determining the appropriate level to renew the PAL.

(d) PAL adjustment.

1. A PAL shall not exceed the source's potential to emit. The cabinet shall adjust the PAL downward to a level not greater than the potential to emit if a source's potential to emit has declined below the PAL level.

2. The cabinet may renew the PAL at the same level as the current PAL without considering the factors specified in subparagraph 3 of this section, if the emissions level calculated according to subsection (5) of this section is equal to or greater than eighty (80) percent of the PAL level; or

3. The cabinet may set the PAL at a level that is determined to be:

a. More representative of the source's baseline actual emissions; or

b. Appropriate considering the following factors:

(i) Air quality needs;

(ii) Advances in control technology;

(iii) Anticipated economic growth in the area of the source;

(iv) The cabinet's goal of promoting voluntary emissions reductions; or

(v) Other factors as specifically identified by the cabinet in its written rationale for setting the

PAL level.

4. The cabinet shall not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of subsection (10) of this section.

(e) The PAL shall be adjusted in conjunction with the PAL permit renewal or Title V permit renewal, whichever comes first, if:

1. The compliance date for a state or federal applicable requirement that applies to the PAL source occurs during the PAL effective period; and

2. The cabinet has not already adjusted for the requirement.

(10) Increasing a PAL during the PAL effective period. The cabinet may increase a PAL emissions limitation during the PAL effective period if the major stationary source complies with the provisions of this subsection.

(a) Application procedures. To request an increase in the PAL limit for a PAL major modification, the owner or operator of the major stationary source shall submit a complete application, which shall include:

1. Identification of the emissions units contributing to the increase in emissions for the PAL major modification;

2. Demonstration that increased PAL, as calculated in paragraph (c) of this subsection exceeds the PAL, and:

a. The level of control that results from BACT equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis when the application is submitted, unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding ten (10) years.

b. If an emissions unit currently complies with BACT or LAER, the assumed control level for that emissions unit shall be equal to the current level of BACT or LAER for that emissions unit; and

3. A statement that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

(b) NSR permit and compliance requirement. The owner or operator shall obtain a major NSR permit for all emissions units contributing to the increase in emissions for the PAL major modification.

1. A significant level shall not apply in deciding for which emissions units a major NSR permit shall be obtained; and

2. Emissions units that obtain a major NSR permit shall comply with any emissions requirements resulting from the major NSR process, even though the units shall also become subject to the PAL or shall continue to be subject to the PAL.

(c) Calculation of increased PAL. The cabinet shall calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the baseline actual emissions of the significant and major emissions units assuming application of BACT equivalent controls, plus the sum of the baseline actual emissions of the small emissions units.

(d) Public notice requirement. The public notice requirements of subsection (4) of this section shall be followed during PAL permit revision for an increased PAL level.

(11) Monitoring requirements for PALs.

(a) General requirements.

1. Each PAL permit shall contain enforceable requirements for the chosen monitoring system that accurately determines plant-wide emissions of the PAL pollutant in terms of mass per unit of time;

2. A monitoring system authorized for use in the PAL permit shall be:

- a. Approved by the cabinet pursuant to this subsection; and
 - b. Based on sound science and meet generally-acceptable scientific procedures for data quality and manipulation;
3. The data generated by a monitoring system shall meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit;
4. The PAL monitoring system shall employ one (1) or more of the four (4) general monitoring approaches meeting the minimum requirements set forth in paragraph (b) of this subsection;
5. The cabinet may approve an alternative monitoring approach that meets the requirements of subparagraphs 1 to 3 of this paragraph; and
6. Failure to use a monitoring system that meets the requirements of this section shall render the PAL invalid.

(b) Minimum performance requirements for approved monitoring approaches. If conducted in accordance with the minimum requirements in paragraphs (c) to (i) of this subsection, the following shall be acceptable monitoring approaches:

1. Mass balance calculations for activities using coatings or solvents;
2. CEMS;
3. CPMS or PEMS; and
4. Emissions factors.

(c) Mass balance calculations. An owner or operator using mass balance calculations to monitor PAL pollutant emissions from activities using coatings or solvents shall:

1. Provide a demonstrated means of validating the published content of the PAL pollutant contained in or created by all materials used in or at the emissions unit;
2. If it cannot be accounted for in the process, assume that the emissions unit emits all of the PAL pollutant contained in or created by any raw material or fuel used in or at the emissions unit; and
3. If the vendor of the material or fuel from which the pollutant originates publishes a range, use the highest value of the published range of pollutant content to calculate the PAL pollutant emissions, unless the cabinet determines there is site-specific data or a site-specific monitoring program to support another pollutant content within the range.

(d) CEMS. An owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:

1. CEMS shall comply with applicable Performance Specifications found in 40 C.F.R. Part 60, Appendix A; and
2. CEMS shall sample, analyze, and record data at least every fifteen (15) minutes while the emissions unit is operating.

(e) CPMS or PEMS. An owner or operator using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:

1. The CPMS or the PEMS shall be based on current site-specific data demonstrating a correlation between the monitored parameter and the PAL pollutant emissions across the range of operation of the emissions unit; and
2. While the unit is operating, each CPMS or PEMS shall sample, analyze, and record data at least every fifteen (15) minutes, or at another less frequent interval approved by the cabinet.

(f) Emissions factors. An owner or operator using emissions factors to monitor PAL pollutant emissions shall meet the following requirements:

1. All emissions factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;
2. The emissions unit shall operate within the designated range of use for the emissions fac-

tor, if applicable; and

3. The owner or operator of a significant emissions unit that relies on an emissions factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emissions factor within six (6) months of PAL permit issuance if the cabinet determines that the testing is required and technically practicable.

(g) A source owner or operator shall record and report maximum potential emissions without considering enforceable emissions limitations or operational restrictions for an emissions unit during any period of time there is no monitoring data, unless another method for determining emissions during the periods is specified in the PAL permit.

(h) If an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameters and the PAL pollutant emissions rate at all operating points of the emissions unit, as an alternative to the requirements in paragraphs (c) to (g) of this subsection, in conjunction with permit issuance the cabinet shall:

1. Establish default values for determining compliance with the PAL based on the highest potential emissions reasonably estimated at operating points if a correlation cannot be demonstrated; or

2. If there is not a correlation between monitored parameters and the PAL pollutant emissions, determine that operation of the emissions unit during operating conditions is a violation of the PAL.

(i) Revalidation. All data used to establish the PAL pollutant shall be revalidated through performance testing or other scientifically valid means approved by the cabinet. Validation testing shall occur at least once every five (5) years after issuance of the PAL.

(12) Recordkeeping requirements.

(a) The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of this section and of the PAL, including a determination of each emissions unit's twelve (12) month rolling total emissions for five (5) years from the date of the determination.

(b) The PAL permit shall require an owner or operator to retain a copy of the following records for the duration of the PAL effective period plus five (5) years:

1. A copy of the PAL permit application and any applications for revisions to the PAL; and
2. Each annual certification of compliance pursuant to Title V and the data used to certify the compliance.

(13) Reporting and notification requirements. The owner or operator shall submit semi-annual monitoring reports and prompt deviation reports to the cabinet in accordance with 401 KAR Chapter 52 that meet the following requirements:

(a) Semiannual report. The semiannual report shall be submitted to the cabinet within thirty (30) days of the end of each reporting period and shall contain:

1. The identification of owner and operator and the permit number;
2. Total annual emissions, in tpy, based on a twelve (12) month rolling total for each month in the reporting period recorded pursuant to subsection (12)(a) of this section;
3. All data used in calculating the monthly and annual PAL pollutant emissions, including any quality assurance or quality control data;
4. A list of any emissions units modified or added to the major stationary source during the preceding six (6) month period;
5. The number, duration, and cause of any deviations or monitoring malfunctions, other than the time associated with zero and span calibration checks, and any corrective action following a deviation;
6. A notification of permanent or temporary shutdown of any monitoring system including:

- a. The reason for the shutdown;
- b. The anticipated date that the monitoring system shall be fully operational or shall be replaced with another monitoring system;
- c. If applicable, a statement that the emissions unit monitored by the monitoring system continued to operate without the monitoring system; and
- d. The calculation of the emissions of the pollutant or the number determined according to subsection (11)(g) of this section that is included in the permit; and

7. A signed statement by the responsible official, as defined by 401 KAR 51:001, Section 1(210), certifying the truth, accuracy, and completeness of the information provided in the semi-annual report.

(b) Deviation report. The major stationary source owner or operator shall submit reports of any deviation or exceedance of the PAL requirements, including periods monitoring is unavailable.

1. A report submitted pursuant to 40 C.F.R. 70.6(a)(3)(iii)(B) shall satisfy this deviation reporting requirement;

2. The deviation report shall be submitted within the time limits prescribed by the applicable program implementing 40 C.F.R. 70.6(a)(3)(iii)(B);

3. The deviation report shall contain the following information:

- a. The identification of the owner, the operator, and the permit number;
- b. The PAL requirement that experienced the deviation or that was exceeded;
- c. Emissions resulting from the deviation or the exceedance; and
- d. A signed statement by the responsible official, as defined by 401 KAR 51:001, Section 1(210), certifying the truth, accuracy, and completeness of the information provided in the report.

(c) Revalidation results. The owner or operator shall submit to the cabinet the results of any revalidation test or method within three (3) months after completion of the test or method.

(14) Transition requirements.

(a) After the U.S. EPA approves the Kentucky SIP revisions for the PAL provisions published at 67 Fed. Reg. 80186, December 31, 2002, the cabinet shall only issue a PAL that complies with the requirements of this section.

(b) The cabinet may supersede a PAL that was established before August 10, 2006, with a PAL that complies with the requirements of this administrative regulation. (8 Ky.R. 1120; 9 Ky.R. 358; eff. 9-22-1982; 12 Ky.R. 879; 1273; eff. 2-4-1986; 14 Ky.R. 892; eff. 12-11-1987; 1612; 1909; eff. 4-14-1988; 19 Ky.R. 1105; 1585; eff. 2-8-1993; 30 Ky.R. 2209; 2520; eff. 7-14-2004; 36 Ky.R. 895; 1275; 1474; eff. 2-5-2010; 37 Ky.R. 2470; 38 Ky.R. 28; eff. 8-4-2011; 39 Ky.R. 135; eff. 12-7-2012; Crt eff. 7-30-2018; TAm eff. 7-30-2018.)